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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,682	07/23/2003	Kimitaka Watanabe	1419.1080	6688
21171	7590	08/11/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			QUARTERMAN, KEVIN J	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 6 10/624,682	Applicant(s) WATANABE ET AL.	
	Examiner Kevin Quarterman	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0404</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lutschounig (US 6144156).

3. Regarding independent claim 1, Figure 3 of Lutschounig shows an electroluminescent light-emitting sheet comprising a light-emitting layer (6) containing electroluminescence light-emitting elements therein; and an electrode section comprising a plurality of electrode pairs (2a, 2b) which are disposed with a predetermined arrangement, wherein each of the electrode pairs includes first and second electrodes which are electrically separated from each other with a spacing region and disposed in one surface side of the light-emitting layer with a predetermined arrangement.

4. Regarding claim 2, Figure 2 of Lutschounig shows each of the first and second electrodes formed to have a comb-like pattern shape severally, and they are formed to be engaged with each other with a predetermined gap between their teeth with putting a spacing region between each tooth so that each tooth does not touch each other.

5. Regarding claim 3, Lutschounig discloses that the gap between the first and second electrodes which are next to each other is about 0.1-2.0mm (col. 4, ln. 7-10).

6. Regarding claim 4, Lutschounig discloses that each of the widths of the first and second electrodes is about 0.1-5.0mm (col. 4, ln. 6-7).

7. Regarding claim 8, the Examiner notes that the method of operating the device has been given patentable weight. Figure 5 of Lutschounig shows an AC voltage applied individually to the first electrodes and the second electrode. Figure 2 of Lutschounig also shows the second electrodes connected with one another and grounded.

8. Regarding claim 9, Figure 5 of Lutschounig shows an electrically conductive material (8b) placed on the light-emitting layer, and an AC voltage applied to through the light-emitting layer.

9. Regarding claim 10, Lutschounig discloses that the gap between the first and second electrodes which are next to each other is about 0.1-2.0mm, and each of the widths of the first and second electrodes is about 0.1-5.0mm (col. 4, ln. 6-10).

10. Regarding claim 11, Lutschounig discloses that the gap between the first and second electrodes which are next to each other is about 0.2-0.3mm, and each of the widths of the first and second electrodes is about 0.2-0.5mm (col. 4, ln. 6-10).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lutschounig (US 6144156) in view of Hashimoto (US 2002/0017857).

14. Lutschounig teaches the limitations of independent claim 1, as discussed earlier, but fails to exemplify each of the first and second electrodes comprising a deposited aluminum layer. Lutschounig discloses the electrodes comprising copper, instead of aluminum (col. 3, ln. 49).

15. Hashimoto teaches that it is known in the art to provide electroluminescent devices with electrodes comprising, among others, aluminum and copper (pg. 4, [0076]).

16. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Lutschounig with first and second electrodes comprising aluminum, since it is within the general skill of a worker in the art to select a known material on the basis of its suitability to conduct electricity.

17. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutschounig and Hashimoto, as applied to claim 5 above, and further in view of Endo (US 4686110).

18. Lutschounig and Hashimoto teaches the limitations of claim 5, as discussed earlier, but fails to exemplify the aluminum layer having a thickness of about 300-1000Å or 400-800Å.

19. Endo teaches that it is known in the art to provide EL devices with electrodes having a thickness of 100-800Å.

20. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the aluminum layer of Hashimoto having a thickness of about 400-800Å, as taught by Endo, in the EL device of Lutschounig, since where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (MPEP § 2144.05).

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wang (US 6326735) discloses an electroluminescent display panel. Yamashita (JP 2003-243964) discloses a surface acoustic wave filter device. Shiotani (JP 2002-050486) discloses an electrode substrate for EL panel. Ishikawa (JP 2003-173880) discloses a lighting device with EL element.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Quarterman
Examiner
Art Unit 2879

kq 
26 July 2004


Joseph Williams
Primary Examiner
Art Unit 2879